

**ABSTRACT**

A method and apparatus plate a substrate to form wiring by efficiently filling a fine recess formed in a semiconductor substrate with plating metal without a void or contamination. The plating of the substrate to fill a wiring recess formed in the semiconductor substrate with plating metal includes performing an electroless plating process of forming an initial layer on the substrate, and performing an electrolytic plating process of filling the wiring recess with the plating metal, while the initial layer serves as a feeding layer.